

**FRIEDMAN & BRUYA, INC.****ENVIRONMENTAL CHEMISTS**

Date of Report: February 4, 1993

Date Received: February , 1993

Project: 7238, Dept. of Public Health Re: Qual, PO #M27514

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TCLP METALS IN ACCORDANCE WITH  
40 CFR PART 261  
Results Reported as mg/L (ppm)**

<u>Sample ID</u>	<u>M27514C (East Burning Table)</u>	<u>M27514D (Filter Bag Dust)</u>	<u>Regulatory Level</u>
Analyte:			
Arsenic	<0.5	<0.5	5.0
Barium	<1.0	<1.0	100
Cadmium	<0.1	0.1	1.0
Chromium	3.9	1.3	5.0
Lead	<0.5	<0.5	5.0
Mercury	<0.2	<0.2	0.2
Selenium	<0.2	<0.2	1.0
Silver	<0.5	<0.5	5.0
Copper	<0.5	56	
Nickel	57	30	
Zinc	1.8	50	

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40 CFR PART 261****Results Reported as mg/L (ppm)****Quality Assurance**

<u>Sample #</u>	<u>Blank</u>	<u>M27514A (Sandblast) (Duplicate)</u>	<u>Regulatory Level</u>
Analyte:			
Arsenic	<0.5	<0.5	5.0
Barium	<1.0	<1.0	100
Cadmium	<0.1	<0.1	1.0
Chromium	<0.5	<0.5	5.0
Lead	<0.5	<0.5	5.0
Mercury	<0.2	<0.2	0.2
Selenium	<0.2	<0.2	1.0
Silver	<0.5	<0.5	5.0
Copper	<0.5	3.3	
Nickel	<0.5	1.6	
Zinc	<0.5	1.1	

**FRIEDMAN & BRUYA, INC.**  

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**ENVIRONMENTAL CHEMISTS**

Andrew John Friedman  
James E. Bruya, Ph.D.  
(206) 285-8282

3008-B 16th Avenue West  
Seattle, WA 98119  
FAX: (206) 283-5044

**DUPLICATE COPY**

February 4, 1993

**INVOICE # 93ACU0204-1**

Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project 7238, Dept. of Public Health Re: Qual, PO #M27514: Results of testing requested by Gerry Thompson, Project Leader and submitted on February , 1993.

4 soil samples analyzed for TCLP Metals @ \$180 per sample	<u>\$ 720.00</u>
Amount Due .....	<b>\$ 720.00</b>

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February 4, 1993

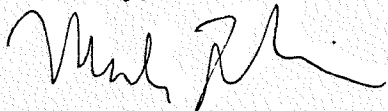
Gerry Thompson, Project Leader  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on February ,  
1993 from Project 7238, Dept. of Public Health Re: Qual, PO #M27514.

We appreciate this opportunity to be of service to you and hope you will call if  
you should have any questions.

Sincerely,



Mark Z Perin  
Chemist

MZP/dp

Enclosures

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40 CFR PART 261****Results Reported as % Recovery  
Quality Assurance**

<u>Sample #</u>	<u>M27514A (Sandblast) Matrix Spike % Recovery</u>	<u>M27514A (Sandblast) Matrix Spike Duplicate % Recovery</u>	<u>Spike Level</u>
Analyte:			
Arsenic	102%	102%	10
Barium	100%	99%	5
Cadmium	95%	95%	5
Chromium	98%	98%	5
Lead	98%	98%	10
Mercury	70%	86%	10
Selenium	101%	100%	10
Silver	105%	100%	2
Copper	91%	90%	5
Nickel	95%	94%	10
Zinc	99%	98%	5

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Quality Assurance

<u>Sample #</u>	<u>Spike Blank</u>	<u>Spike Level</u>
Analyte:		
Arsenic	106%	10
Barium	100%	5
Cadmium	97%	5
Chromium	96%	5
Lead	100%	10
Mercury	98%	10
Selenium	102%	10
Silver	81%	2
Copper	95%	5
Nickel	100%	10
Zinc	103%	5